Method and Apparatus For Optical Signal Processing Using Subcarrier Multiplexed Headers

ABSTRACT OF THE DISCLOSURE

Method and corresponding apparatus for extraction and rewriting of subcarrier multiplexed (SCM) signals such as optical header labels from a SCM/mixed baseband optical signal, and routing of the baseband optical signal on the basis of the extracted header information. The method comprises applying an SCM/mixed baseband signal to a fiber Bragg grating (FBG) filter from which is extracted a modulated signal at information–bandwidth limited photoreceivers tapped to an optical signal path via an optical circulator (OC), causing the SCM optical signal to be stripped from the baseband optical signal. The method further comprises directing the baseband signal through a wavelength converting router in accordance with the information in the extracted SCM signal and writing a new SCM signal onto the baseband signal.

PA 3173186 v1 MJC:KRA